and β are each independently from 0 to 5 naturally occurring amino acids, and the polypeptide is capable of binding antibody in a specimen from an individual with Epstein-Barr virus (EBV)-associated disease are disclosed. Also disclosed are the use of these polypeptides for the production of polypeptide-specific antibodies and the diagnosis and treatment of EBV-associated disease.

REMARKS

After entry of the above referenced amendment, claims 34, 37-41 and 43-52 will be pending. The specification has been amended so as to be consistent with the separate panels (*i.e.*, A, B, C) identified in Figures 2 and 3, respectively. The abstract has been amended and is also submitted herewith on a separate page. No new matter has been added. Attached hereto is a marked-up version of the changes made to the specification and claims by the present amendment. The attached page is captioned "Version with markings to show changes made".

As a preliminary matter, Applicants would like to thank the Examiner for the indication that the claims are in condition for allowance.

Formal Drawings

Applicants acknowledge receipt of the "Attachment for PTO-948" outlining changes for prosecution of applications containing drawings. Formal drawings have been submitted under separate cover to the Draftsperson.

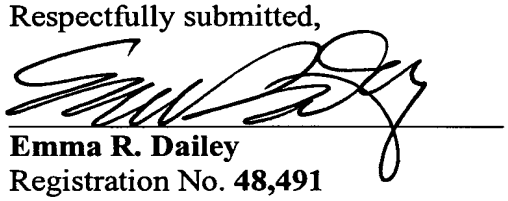
DOCKET NO.: ORGU-0023 **PATENT**

Supplemental Information Disclosure Statement

Applicants reiterate the request that a copy of the Supplemental Information Disclosure Statement November 28, 2001 (received by the PTO on December 18, 2001) be initialed and returned with the next communication. A courtesy copy has been enclosed herewith.

The undersigned invites the Examiner to contact her at the number below should there be any questions or issues that arise.

Respectfully submitted,



Emma R. Dailey
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Date: November 25, 2002

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VERSION WITH MARKINGS TO SHOW CHANGES MADE

In the Specification

On page 7, please delete the second and third paragraphs and insert the following paragraphs presented below in amended form:

[FIGURE 2] FIGURES 2A, 2B and 2C show the proliferation response of PBL from three anti-VCA-positive, anti-EA-negative individuals (A-C) to different concentrations of the three p17 synthetic peptides.

[FIGURE 3 shows] FIGURES 3A and 3B show proliferation response of CD4+ and CD8+ T-cell subpopulations from two donors (A and B) to different concentrations of the synthetic peptide, P17.1.

On page 35, please delete the second paragraph and insert the following paragraph in amended form:

PBL from 3 anti-VCA-positive anti-EA-antibody-negative individuals were also examined in the proliferation assay with the three synthetic peptides. These results are shown in [Figure 2] Figures 2A, 2B and 2C. Again, all 3 PBL preparations responded to the highest concentrations of p17.1 with S.I.'s ranging from 3.5-11. Two of the preparations (Figs. 2A, C) also proliferated in the presence of lower concentrations of antigen with S.I.'s of 3 and 5 respectively. None of these PBL preparations proliferated in the presence of p17.2 and p17.3. These experiments established that T-lymphocytes from EBV-infected individuals, irrespective of the presence of antibody to EA, recognized a dominant epitope on p17.

On page 38, please delete the third paragraph and insert the following paragraph in amended form:

To determine whether both CD4+ and CD8+ T-cell subpopulations were responding to p17.1, lymphocytes from two donors were separated into these two subpopulations which were then employed in the proliferation assay. Results are presented in [Figure 3] Figures 3A and 3B. The PBL from both donor proliferated in the presence of p17.1 at the highest concentrations tested in this experiment (100 μg per ml for donor [a] A and 50 μg per ml for donor B). The CD4+ subpopulation from donor A also responded vigorously to different concentrations of p17.1 with S.I.s as high as 5.3. The CD8+ subpopulation from this donor was unresponsive to this synthetic peptide. This pattern of response was also observed with fractionated CD4+ and CF8+ T-cells from another seropositive donor. In contrast, both the CD4+ and CD8+ T-cell subpopulations from donor B responded to p17.1 with CD8+ subpopulations giving a S.I. of greater than 3 at the highest antigen concentrations tested (50 μg per ml). These results therefore indicated that both CD4+ and CD8+ T-cells recognized this p17 epitope.

Please delete the present Abstract and insert the following abstract in amended form (the Abstract also will be submitted herewith on a separate page):

[Eppstein] Epstein-Barr virus (EBV) specific polypeptides consisting of a series of one to 1000 peptide units selected from the group consisting of peptide units Φ, Γ, Δ and Ω, wherein Φ is 25 amino acids or less and has the formula (αETFTETWNRFITHTEβ) (SEQ ID NO:1), Γ is 25 amino acids or less and has the formula (αGMLEASEGLDGWIHQβ) (SEQ ID NO:2), Δ is 25 amino acids or less and has the formula (αHQQGGWSTLIEDNIPβ) (SEQ ID NO:3), Ω is 25 amino acids or less and has the formula (αKQKHPKKVKQAFNPLβ) (SEQ

ID NO:4), α and β are each independently from 0 to 5 naturally occurring amino acids, and the polypeptide is capable of binding antibody in a specimen from an individual with Epstein-Barr virus (EBV)-associated disease are disclosed. Also disclosed are the use of these polypeptides for the production of polypeptide-specific antibodies and the diagnosis and treatment of EBV-associated disease.